

WHAT IS CLAIMED IS:

1. A chamber for processing a semiconductor article, the chamber comprising:
a chamber body having a bottom wall with a pumping port formed therein;
an article support disposed inside the chamber body, the article support comprising:
an upper surface, and
a lower surface facing the bottom wall;
wherein the article support has a first width sufficient to support the semiconductor article on the upper surface; and
a stem extending from the bottom wall of the chamber body to the lower surface of the article support, the stem supporting the article support;
wherein the stem has a second width substantially smaller than the first width.
2. The chamber for processing a semiconductor article of claim 1, wherein the article support is substantially circular, having a center, and wherein the stem connects to the article support substantially at the center.
3. The chamber for processing a semiconductor article of claim 2, wherein the pumping port is located at least partially beneath the article support.
4. The chamber for processing a semiconductor article of claim 1, wherein the article support is substantially circular, having a center, and wherein the stem connects to the article support at a position offset from the center.
5. The chamber for processing a semiconductor article of claim 4, wherein the pumping port is located substantially completely beneath the article support.
6. The chamber for processing a semiconductor article of claim 1, wherein the stem comprises bellows that permits movement of the article support with respect to the bottom wall of the chamber.
7. The chamber for processing a semiconductor article of claim 1, wherein the article support is supplied with a DC potential via the stem.

8. The chamber for processing a semiconductor article of claim 1, wherein the article support is supplied with helium gas, via the stem, to enhance thermal conduction between the article support and the semiconductor wafer.

9. The chamber for processing a semiconductor article of claim 1, wherein internal cooling journals formed in the article support are supplied with coolant via the stem.

10. The chamber for processing a semiconductor article of claim 1, wherein the stem comprises bellows disposed between the article support and the bottom wall of the processing chamber, the bellows permitting linear motion between the article support and the bottom side of the processing chamber along a longitudinal axis of the stem.

11. The chamber for processing a semiconductor article of claim 1, wherein the stem is adapted to couple RF energy to the article support.

12. A processing system for simultaneously processing plural semiconductor articles under substantially identical process conditions, the processing system comprising:
a chamber body having a bottom wall with a pumping port formed therein;
a vacuum pump in fluid communication with the pump port;
plural article supports disposed inside the chamber body, each of the plural article support comprising: an upper surface, and a lower surface facing the bottom wall; and
plural stems, each supporting a respective one of the plural article supports, each of the plural stems extending from the bottom wall to the lower surface of its respective article support;

wherein each of the plural article supports is sufficiently wide to support one of the plural semiconductor articles on its upper surface, and wherein each of the article supports is substantially wider than its respective stem.

13. The processing system of claim 12, wherein the pumping port is located at least partially beneath each of the plural article supports.

14. The processing system of claim 12, wherein each of the plural article supports is supplied, via its respective stem, with DC potential, helium gas, and coolant.

15. The processing system of claim 12, wherein each of the plural stems comprises bellows permitting linear motion, along a longitudinal axis of that stem, of the respective article support with respect to the bottom wall of the chamber body.

16. A processing system for simultaneously processing two semiconductor articles under substantially identical process conditions, the processing system comprising:

a chamber having a first bottom wall with a pumping port formed therein;

a vacuum pump in fluid communication with the pumping port;

a first article support disposed inside the chamber body, the first article support comprising: a first upper surface, and a first lower surface facing the bottom wall;

a first stem supporting the first article support, the first stem extending from the bottom wall to the first lower surface, wherein the first article support is sufficiently wide to support one of the two semiconductor articles on the first upper surface, and the first article support is substantially wider than the first stem;

a second article support disposed inside the chamber body, the second article support comprising: a second upper surface, and a second lower surface facing the bottom wall; and

a second stem supporting the second article support, the second stem extending from the bottom wall to the second lower surface, wherein the second article support is sufficiently wide to support the other of the two semiconductor articles on the second upper surface, and the second article support is substantially wider than the second stem;

wherein the pumping port is located at least partially beneath the first article support and at least partially beneath the second article support.

17. The processing system of claim 16, wherein the first and second article supports each have geometric centers, and wherein the first stem connects to the first article support substantially at its geometric center and the second stem connects to the second article support substantially at its geometric center.

18. The processing system of claim 16, wherein the first and second article supports are each supplied, via their respective stems, with DC potential, helium gas, and coolant.

19. The processing system of claim 16, wherein the first stem comprises bellows permitting linear motion, along a longitudinal axis of the first stem, of the first article support with respect to the bottom wall of the chamber body; and

wherein the second stem comprises bellows permitting linear motion, along a longitudinal axis of the second stem, of the second article support with respect to the bottom wall of the chamber body.